

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE


[Membership](#) [Publications/Services](#) [Standards](#) [Conferences](#) [Careers/Jobs](#)

 Welcome  
 United States Patent and Trademark Office

[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)
[Quick Links](#)
[» Search Results](#)

### Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

### Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

### Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

### Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

### IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

Print Format

### Full-text Search Prototype Results

[Feedback](#) [Help](#)

Your search matched **8** of **1043369** documents.  
 A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

### Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.


☐ Check to search within this result set

### Results Key:

**JNL** = Journal or Magazine   **CNF** = Conference   **STD** = Standard

### 1 Managing static leakage energy in microprocessor functional units

*Dropsho, S.; Kursun, V.; Albonesi, D.H.; Dwarkadas, S.; Friedman, E.G.;*  
 Microarchitecture, 2002. (MICRO-35). Proceedings. 35th Annual IEEE/ACM  
 International Symposium on , 18-22 Nov. 2002  
 Pages:321 - 332

[\[Abstract\]](#)   [\[PDF Full-Text \(362 KB\)\]](#)   **IEEE CNF**

### 2 Overview of complementary GaAs technology for high-speed VLSI circuits

*Brown, R.B.; Bernhardt, B.; LaMacchia, M.; Abrokwhah, J.; Parakh, P.N.; Basso, T.D.; Gold, S.M.; Stetson, S.; Gauthier, C.R.; Foster, D.; Crawforth, B.; McQuire, T.; Sakallah, K.; Lomax, R.J.; Mudge, T.N.;*  
 Very Large Scale Integration (VLSI) Systems, IEEE Transactions on , Volume:  
 6 , Issue: 1 , March 1998  
 Pages:47 - 51

[\[Abstract\]](#)   [\[PDF Full-Text \(108 KB\)\]](#)   **IEEE JNL**

### 3 A high-speed asynchronous decompression circuit for embedded processors

*Benes, M.; Wolfe, A.; Nowick, S.M.;*  
 Advanced Research in VLSI, 1997. Proceedings., Seventeenth Conference on , 15-16 Sept. 1997  
 Pages:219 - 236

[\[Abstract\]](#)   [\[PDF Full-Text \(1064 KB\)\]](#)   **IEEE CNF**

---

**4 Flow-through latch and edge-triggered flip-flop hybrid elements**

*Partovi, H.; Burd, R.; Salim, U.; Weber, F.; DiGregorio, L.; Draper, D.;*  
Solid-State Circuits Conference, 1996. Digest of Technical Papers. 43rd ISSCC.,  
1996 IEEE International , 8-10 Feb. 1996  
Pages:138 - 139

[\[Abstract\]](#) [\[PDF Full-Text \(536 KB\)\]](#) **IEEE CNF**

---

**5 A 150-mW subscriber-line-board controller**

*Van Simaey, F.C.; Guebels, P.; Rahier, M.C.; Van De Weghe, H.; Huyskens, E.G.;*  
Solid-State Circuits, IEEE Journal of , Volume: 21 , Issue: 2 , Apr 1986  
Pages:259 - 266

[\[Abstract\]](#) [\[PDF Full-Text \(1016 KB\)\]](#) **IEEE JNL**

---

**6 Low-power and high-speed ROM modules for ASIC applications**

*Ching-Rong Chang; Jinn-Shyan Wang; Cheng-Hui Yang;*  
Solid-State Circuits, IEEE Journal of , Volume: 36 , Issue: 10 , Oct. 2001  
Pages:1516 - 1523

[\[Abstract\]](#) [\[PDF Full-Text \(304 KB\)\]](#) **IEEE JNL**

---

**7 Capacitor coupling threshold logic**

*Jia, C.; Milor, L.; Huang, H.-Y.;*  
Circuits and Systems, 2002. MWSCAS-2002. The 2002 45th Midwest Symposium  
on , Volume: 1 , 4-7 Aug. 2002  
Pages:I - 483-6 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(307 KB\)\]](#) **IEEE CNF**

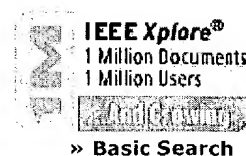
---

**8 A novel latch design technique for high speed GaAs circuits**

*Nooshabadi, S.; Montiel-Nelson, J.A.; Eshraghian, K.;*  
Electronics, Circuits and Systems, 1999. Proceedings of ICECS '99. The 6th IEEE  
International Conference on , Volume: 1 , 5-8 Sept. 1999  
Pages:331 - 334 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(144 KB\)\]](#) **IEEE CNF**

---

[IEEE HOME](#) | [SEARCH IEEE](#) | [SHOP](#) | [WEB ACCOUNT](#) | [CONTACT IEEE](#)[Membership](#) | [Publications/Services](#) | [Standards](#) | [Conferences](#) | [Careers/Jobs](#)Welcome  
United States Patent and Trademark Office[Help](#) | [FAQ](#) | [Terms](#) | [IEEE Peer Review](#)[Quick Links](#)[» Basic Search](#)**Welcome to IEEE Xplore®**

- ☐ [Home](#)
- ☐ [What Can I Access?](#)
- ☐ [Log-out](#)

**Tables of Contents**

- ☐ [Journals & Magazines](#)
- ☐ [Conference Proceedings](#)
- ☐ [Standards](#)

**Search**

- ☐ [By Author](#)
- ☐ [Basic](#)
- ☐ [Advanced](#)

**Member Services**

- ☐ [Join IEEE](#)
- ☐ [Establish IEEE Web Account](#)
- ☐ [Access the IEEE Member Digital Library](#)

**IEEE Enterprise**

- ☐ [Access the IEEE Enterprise File Cabinet](#)

**Full-text Search Prototype**

Select the Full-text & All Fields option to search full-text and associated metadata fields. Approximately 100,000 documents are currently full-text searchable. In the coming months, IEEE will be expanding the full-text search capability to more documents in the database. [Help](#)

This full-text search prototype is currently under development. As a prototype search, we want your feedback. Please tell us what you think by completing a [brief form](#). Thank you.

- 1) Enter keywords in one or more text boxes.
- 2) Select the fields to search for each keyword.
- 3) Select search operators when using multiple keywords.
- 4) Limit the results by selecting Search Options.
- 5) Click Search. See [Search Examples](#)

domino logic In: Full-text &amp; All Fields

And

dynamic In: Full-text &amp; All Fields

And

huffman In: Full-text &amp; All Fields

**Note:** This function returns plural and suffixed forms of the keyword(s).

**Search Options:****Select publication types:**

- ☒ IEEE Journals
- ☒ IEE Journals
- ☒ IEEE Conference proceedings
- ☒ IEE Conference proceedings
- ☒ IEEE Standards

**Select years to search:**

From year: All to Present

**Organize search results by:**

Sort by: Relevance

In: Descending order

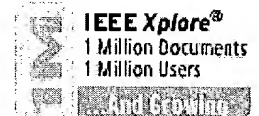
List 15 Results per page

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC](#) | [Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE


[Membership](#) | [Publications/Services](#) | [Standards](#) | [Conferences](#) | [Careers/Jobs](#)

 Welcome  
 United States Patent and Trademark Office

[Help](#) | [FAQ](#) | [Terms](#) | [IEEE Peer Review](#)
[Quick Links](#)
» [Search Results](#)

## Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

## Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

## Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

## Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

## IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

Print Format

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

## Full-text Search Prototype Results

[Feedback](#) [Help](#)

Your search matched **0** of **1043369** documents.  
 A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

## Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.


☐ Check to search within this result set

## Results Key:

**JNL** = Journal or Magazine    **CNF** = Conference    **STD** = Standard

## Results:

No documents matched your query.

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE


[Membership](#) [Publications/Services](#) [Standards](#) [Conferences](#) [Careers/Jobs](#)

 Welcome  
 United States Patent and Trademark Office

[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)
[Quick Links](#)

Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

[Search Results](#) [\[PDF FULL-TEXT 600 KB\]](#) [DOWNLOAD CITATION](#)


Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

Print Format

## Hazard-free implementation of speed-independent circuits

[Kondratyev, A.](#) [Kishinevsky, M.](#) [Yakovlev, A.](#)

Aizu Univ., Japan;

*This paper appears in: Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on*

Publication Date: Sept. 1998

On page(s): 749 - 771

Volume: 17, Issue: 9

ISSN: 0278-0070

Reference Cited: 43

CODEN: ITCSDI

Inspec Accession Number: 6041724

### Abstract:

This paper develops a theoretical framework for the hazard-free gate-level implementation of speed-independent circuits specified by event-based models, such as signal transition graphs (for processes with AND causality and input choice) or their extension, called change diagrams (which allow OR-causality). It presents sufficient conditions, called the generalized monotonous cover requirements, for a hazard-free circuit to be built within a standard implementation structure. This structure consists of two-level simple-gate combinational logic and a row of latches, either a C-element or an RS-latch. A set of semantic-preserving transformations is defined that can be applied to an original behavioral description of the circuit so as to produce its specification in the form that satisfies the monotonous cover requirement. The transformations are applied at the event-based representation level (to avoid state explosion) and proved to be effective. The main result of the paper is therefore twofold: 1) the proof that any speed-independent behavior can be implemented at the gate level without hazards and 2) an efficient method for constructing such an implementation. Experimental results show that the proposed method compares very favorably, in area and performance, to the previously known techniques

### Index Terms:

[asynchronous circuits](#) [combinational circuits](#) [hazards and race conditions](#) [logic CAD](#) [signal flow graphs](#) [AND causality](#) [C-element](#) [OR-causality](#) [RS-latch](#) [asynchronous circuits](#) [behavioral description](#) [change diagrams](#) [event-based models](#) [gate-level implementation](#) [generalized monotonous cover requirements](#) [hazard-free implementation](#) [latches](#) [logic synthesis](#) [semantic-](#)

[preserving transformations](#) [signal transition graphs](#) [speed-independent circuits](#) [two-level simple-gate combinational logic](#)

---

#### **Documents that cite this document**

Select link to view other documents in the database that cite this one.

---

#### **Reference list:**

1, P.Beerel and T.Meng, "Semi-modularity and testability of speed-independent circuits," *Integration, VLSI J.*, vol. 13, no. 3, 1992.

2, P.Beerel and T.Meng, "Automatic gate-level synthesis of speed-independent circuits," *Proc. Int. Conf. Computer-Aided Design*, pp. 581-587, Nov. 1992.  
[Abstract] [PDF Full-Text (616KB)]

3, P.Beerel and T.Meng, "Logic transformations and observability don't cares in speed-independent circuits," *Proc. ACM Int. Workshop Timing Issues in the Specification and Synthesis of Digital Systems (TAU'93)* Malente, Germany, Sept. 1993.

4, T.-A.Chu, "Synthesis of self-timed VLSI circuits from graph-theoretic specifications," *Proceedings of ICCD-87*, New York: IEEE Computer Society Press, pp. 220-223, 1987.

5, T.-A.Chu, *Synthesis of Self-Timed VLSI Circuits from Graph-Theoretic Specifications*, Ph.D. dissertation Cambridge: Massachusetts Institute of Technology, June 1987.

6, T.-A.Chu, "Automatic synthesis and verification of hazard-free control circuits from asynchronous finite state machine specifications," *Proc. ICCD'92* Cambridge, MA, pp. 407-413, Oct. 1992.  
[Abstract] [PDF Full-Text (588KB)]

7, T.-A.Chu, "Synthesis of hazard-free control circuits from asynchronous finite state machine specifications," *Proc. ACM Int. Workshop Timing Issues in the Specification and Synthesis of Digital Systems* Princeton, NJ, Mar. 1992.

8, J.Cortadella, M.Kishinevsky, A.Kondratyev, L.Lavagno, and A.Yakovlev, "Complete state encoding based on the theory of regions," *Proc. Int. Symp. Advanced Research in Asynchronous Circuits and Systems*, pp. 36-47, Mar. 1996.  
[Abstract] [PDF Full-Text (1192KB)]

9, J.Cortadella, M.Kishinevsky, A.Kondratyev, L.Lavagno, and A.Yakovlev, "Petrify: A tool for manipulating concurrent specifications and synthesis of asynchronous controllers," *IEICE Trans. Inform. Syst.*, vol. E80-D, no. 3, pp. 315-325, Mar. 1997.

10, J.Cortadella, M.Kishinevsky, A.Kondratyev, L.Lavagno, E.Pastor, and A.Yakovlev, "Decomposition and technology mapping of speed-independent circuits using Boolean relations," *Proc. Int. Conf. Computer-Aided Design*, pp. 220-227, Nov. 1997.  
[Abstract] [PDF Full-Text (964KB)]

11, J.Cortadella, L.Lavagno, P.Vanbekbergen, and A.Yakovlev, "Designing asynchronous circuits from behavioral specifications with internal conflicts," *Proc. Int. Symp. Advanced Research in Asynchronous Circuits and Systems* Salt Lake City, UT, pp. 106-115, Nov. 1994.  
[Abstract] [PDF Full-Text (816KB)]

- 12, D. L.Dill, *Trace Theory for Automatic Hierarchical Verification of Speed-Independent Circuits* Cambridge, MA: MIT Press, 1988.
- 13, M.Hack, *Analysis of production schemata by petri nets* Cambridge: Massachusetts Institute of Technology, Technical Report, Tech. Rep., Project MAC, Feb. 1972.
- 14, D. A.Huffman, "The synthesis of sequential switching circuits," *J. Frank. Inst.*, vol. 257, pp. 161–190, 275–303, Mar. 1954.
- 15, M.Kishinevsky, A.Kondratyev, A.Taubin, and V.Varshavsky, *Concurrent Hardware: The Theory and Practice of Self-Timed Design* London: Wiley, 1993.
- 16, A.Kondratyev, J.Cortadella, M.Kishinevsky, E.Pastor, O.Roig, and A.Yakovlev, "Checking signal transition graph implementability by symbolic BDD traversal," *Proceedings of the European Design and Test Conference*, New York: IEEE Computer Society Press, pp. 325-332, 1995.  
[Abstract] [PDF Full-Text (612KB)]
- 17, A.Kondratyev, M.Kishinevsky, B.Lin, P.Vanbekbergen, and A.Yakovlev, "On the conditions for the gate-level speed-independence of asynchronous circuits," *Proc. ACM Int. Workshop Timing Issues in the Specification and Synthesis of Digital Systems (TAU'93)* Malente, Germany, Sept. 1993.
- 18, A.Kondratyev, M.Kishinevsky, B.Lin, P.Vanbekbergen, and A.Yakovlev, "Basic gate implementation of speed-independent circuits," *Proc. Design Automation Conf.*, pp. 56-62, June 1994.
- 19, A.Kondratyev, M.Kishinevsky, and A.Yakovlev, *Monotonous cover transformations for speed-independent implementation of asynchronous circuits*, Japan: Aizu University, Tech. Rep., Mar. 1994.
- 20, L.Lavagno and A.Sangiovanni-Vincentelli, *Algorithms for Synthesis and Testing of Asynchronous Circuits* Norwell, MA: Kluwer, 1993.
- 21, L.Lavagno, K.Keutzer, and A.Sangiovanni-Vincentelli, "Algorithms for synthesis of hazard-free asynchronous circuits," *Proc. Design Automation Conf.*, pp. 302-308, 1991.
- 22, L.Lavagno, C.Moon, R.Brayton, and A.Sangiovanni-Vincentelli, "Solving the state assignment problem for signal transition graphs," *Proc. Design Automation Conf.*, pp. 568-572, 1992.  
[Abstract] [PDF Full-Text (480KB)]
- 23, A.Martin, "Synthesis of asynchronous VLSI circuits," *Formal Methods for VLSI Design*, J.Staunstrup, Ed. Amsterdam, The Netherlands: North-Holland, 1990.
- 24, A. J.Martin, S. M.Burns, T. K.Lee, D.Borkovic, and P. J.Hazewindus, "The first asynchronous microprocessor: The test results," *Comput. Architecture News*, vol. 17, no. 4, pp. 95-110, June 1989.
- 25, T. H.-Y.Meng, *Synchronization Design for Digital Systems* Norwell, MA: Kluwer, 1991.



- 26, R. E. Miller, "Sequential Circuits and Machines," *Switching Theory*, New York: Wiley, vol. 2, 1965.
- 27, C. W. Moon, P. R. Stephan, and R. K. Brayton, "Synthesis of hazard-free asynchronous circuits from graphical specifications," *Proceedings of ICCAD-91*, New York: IEEE Computer Society Press, pp. 322-325, 1991.  
[Abstract] [PDF Full-Text (364KB)]
- 28, D. Muller and W. Bartky, "A theory of asynchronous circuits," *Annals of Computation Laboratory* Cambridge, MA: Harvard Univ. Press, pp. 204-243, 1959.
- 29, T. Murata, "Petri nets: Properties, analysis and applications," *Proc. IEEE*, vol. 77, pp. 541-580, Apr. 1989.  
[Abstract] [PDF Full-Text (2988KB)]
- 30, S. M. Nowick and D. L. Dill, "Exact two-level minimization of hazard-free logic with multiple-input changes," *IEEE Trans. Computer-Aided Design*, vol. 14, pp. 986-997, Aug. 1995.  
[Abstract] [PDF Full-Text (1172KB)]
- 31, S. M. Nowick and B. Coates, "Automated design of high-performance unclocked state machines," *Proc. ACM Int. Workshop Timing Issues in the Specification and Synthesis of Digital Systems (TAU)*, Sept. 1993.
- 32, E. Pastor and J. Cortadella, *Polynomial algorithms for complete state coding and synthesis of hazard-free circuits from signal transition graphs*, Spain: Universitat Politecnica de Catalunya, Tech. Rep. RR 93/17 UPC/DAC, Sept. 1993.
- 33, E. Pastor, J. Cortadella, O. Roig, and A. Kondratyev, "Structural methods for the synthesis of speed-independent circuits," *Proceedings of the European Design and Test Conference*, New York: IEEE Computer Society Press, pp. 340-347, 1996.  
[Abstract] [PDF Full-Text (836KB)]
- 34, S. H. Unger, *Asynchronous Sequential Switching Circuits*, New York: Wiley-Interscience, 1969.
- 35, K. van Berkel, R. Burgess, J. Kessels, A. Peeters, M. Roncken, and F. Schalij, "A fully-asynchronous low-power error corrector for the DCC player," *ISSCC 1994 Dig. Tech. Papers* San Francisco, CA, vol. 37, pp. 88-89, 1994.  
[Abstract] [PDF Full-Text (272KB)]
- 36, P. Vanbekbergen, F. Cathoor, G. Goossens, and H. De Man, "Time and area performant synthesis of asynchronous control circuits," *Proc. ACM Int. Workshop Timing Issues in the Specification and Synthesis of Digital Systems* Vancouver, Canada, Aug. 1990.
- 37, P. Vanbekbergen, B. Lin, G. Goossens, and H. De Man, "A generalized state assignment theory for transformations on signal transition graphs," *Proc. ICCD'92* Cambridge, MA, Oct. 1992.
- 38, V. Varshavsky, Ed. *Self-Timed Control of Concurrent Processes* Dordrecht, The Netherlands: Kluwer, 1990.

39, V.Varshavsky, M.Kishinevsky, A.Kondratyev, L.Rosenblyum, and A.Taubin, "Models for specification and analysis of processes in asynchronous circuits," *Sov. J. Comput. Syst. Sci.*, vol. 26, no. 2, pp. 61-76, 1989.

40, A.Yakovlev, M.Kishinevsky, A.Kondratyev, and L.Lavagno, "OR causality: Modeling and hardware implementation," *Proc. 15th Int. Conf. Application and Theory of Petri Nets Zaragosa, Spain*, pp. 568-587, June 1994.

41, A.Yakovlev, L.Lavagno, and A.Sangiovanni-Vincentelli, "A unified signal transition graph model for asynchronous control circuit synthesis," *Proc. ICCAD'92 Santa Clara, CA*, pp. 104-111, Nov. 1992.

[[Abstract](#)] [[PDF Full-Text \(844KB\)](#)]

42, M.Yu and P.Subrahmanyam, "Hazard-free asynchronous circuit synthesis," *Proc. Working Conf. Asynchronous Design Methodologies Manchester, England*, Mar. 1993.

43, K. Y.Yun and D. L.Dill, "Automatic synthesis of 3D asynchronous state machines," *Proc. Int. Conf. Computer-Aided Design*, pp. 576-580, Nov. 1992.

[[Abstract](#)] [[PDF Full-Text \(476KB\)](#)]

---

[Search Results](#) [[PDF FULL-TEXT 600 KB](#)] [[DOWNLOAD CITATION](#)]

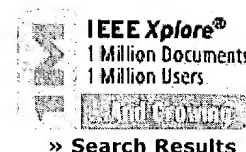
---

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC](#) | [Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE


[Membership](#) [Publications/Services](#) [Standards](#) [Conferences](#) [Careers/Jobs](#)

 Welcome  
 United States Patent and Trademark Office

[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)
[Quick Links](#)

### Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

### Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

### Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

### Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

### IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

Print Format

### Full-text Search Prototype Results

[Feedback](#) [Help](#)

Your search matched **9** of **1043369** documents.  
 A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

### Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.


☐ Check to search within this result set

### Results Key:

**JNL** = Journal or Magazine   **CNF** = Conference   **STD** = Standard

#### 1 A fast asynchronous Huffman decoder for compressed-code embedded processors

*Benes, R.; Nowick, S.M.; Wolfe, A.;*

Advanced Research in Asynchronous Circuits and Systems, 1998. Proceedings. 1998 Fourth International Symposium on , 30 March-2 April 1998  
 Pages:43 - 56

[\[Abstract\]](#)   [\[PDF Full-Text \(912 KB\)\]](#)   IEEE CNF

#### 2 SAMC: a code compression algorithm for embedded processors

*Lekatsas, H.; Wolf, W.;*

Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on , Volume: 18 , Issue: 12 , Dec. 1999  
 Pages:1689 - 1701

[\[Abstract\]](#)   [\[PDF Full-Text \(504 KB\)\]](#)   IEEE JNL

#### 3 Transport of wireless video using separate, concatenated, and joint source-channel coding

*van Dyck, R.E.; Miller, D.J.;*

Proceedings of the IEEE , Volume: 87 , Issue: 10 , Oct. 1999  
 Pages:1734 - 1750

[\[Abstract\]](#)   [\[PDF Full-Text \(312 KB\)\]](#)   IEEE JNL

#### 4 Huffman code based error screening and channel code optimization for error concealment in perceptual audio coding (PAC) algorithms

*Laneman, J.N.; Sundberg, C.-E.W.; Faller, C.;*  
Broadcasting, IEEE Transactions on , Volume: 48 , Issue: 3 , Sept. 2002  
Pages:193 - 206

[\[Abstract\]](#) [\[PDF Full-Text \(456 KB\)\]](#) [IEEE JNL](#)

---

**5 Applications of asynchronous circuits**

*Van Berkel, C.H.; Josephs, M.B.; Nowick, S.M.;*  
Proceedings of the IEEE , Volume: 87 , Issue: 2 , Feb. 1999  
Pages:223 - 233

[\[Abstract\]](#) [\[PDF Full-Text \(252 KB\)\]](#) [IEEE JNL](#)

---

**6 Fast heuristic and exact algorithms for two-level hazard-free logic minimization**

*Theobald, M.; Nowick, S.M.;*  
Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on , Volume: 17 , Issue: 11 , Nov. 1998  
Pages:1130 - 1147

[\[Abstract\]](#) [\[PDF Full-Text \(1172 KB\)\]](#) [IEEE JNL](#)

---

**7 Expression-tree-based algorithms for code compression on embedded RISC architectures**

*Araujo, G.; Centoducatte, P.; Azevedo, R.; Pannain, R.;*  
Very Large Scale Integration (VLSI) Systems, IEEE Transactions on , Volume: 8 , Issue: 5 , Oct. 2000  
Pages:530 - 533

[\[Abstract\]](#) [\[PDF Full-Text \(108 KB\)\]](#) [IEEE JNL](#)

---

**8 Joint source/channel coding for variable length codes**

*Sayood, K.; Otu, H.H.; Demir, N.;*  
Communications, IEEE Transactions on , Volume: 48 , Issue: 5 , May 2000  
Pages:787 - 794

[\[Abstract\]](#) [\[PDF Full-Text \(224 KB\)\]](#) [IEEE JNL](#)

---

**9 LZW-based code compression for VLIW embedded systems**

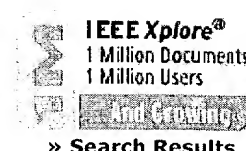
*Chang Hong Lin; Yuan Xie; Wolf, W.;*  
Design, Automation and Test in Europe Conference and Exhibition, 2004.  
Proceedings , Volume: 3 , 16-20 Feb. 2004  
Pages:76 - 81

[\[Abstract\]](#) [\[PDF Full-Text \(521 KB\)\]](#) [IEEE CNF](#)

---

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE


[Membership](#) [Publications/Services](#) [Standards](#) [Conferences](#) [Careers/Jobs](#)

 Welcome  
 United States Patent and Trademark Office

[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)
[Quick Links](#)
[» Search Results](#)

### Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

### Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

### Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

### Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

### IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

Print Format

## Full-text Search Prototype Results

[Feedback](#) [Help](#)

Your search matched **13** of **202** documents.  
 A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

### Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.


☐ Check to search within this result set

### Results Key:

**JNL** = Journal or Magazine   **CNF** = Conference   **STD** = Standard

#### 1 Relative timing [asynchronous design]

*Stevens, K.S.; Ginosar, R.; Rotem, S.;*  
 Very Large Scale Integration (VLSI) Systems, IEEE Transactions on , Volume:  
 11 , Issue: 1 , Feb. 2003  
 Pages:129 - 140

[\[Abstract\]](#)   [\[PDF Full-Text \(562 KB\)\]](#)   **IEEE JNL**

#### 2 Subject Index

Circuits and Systems for Video Technology, IEEE Transactions on , Volume:  
 9 , Issue: 8 , Dec. 1999  
 Pages:5 - 15

[\[Abstract\]](#)   [\[PDF Full-Text \(228 KB\)\]](#)   **IEEE JNL**

#### 3 Subject Index

Solid-State Circuits, IEEE Journal of , Volume: 34 , Issue: 12 , Dec. 1999  
 Pages:12 - 36

[\[Abstract\]](#)   [\[PDF Full-Text \(412 KB\)\]](#)   **IEEE JNL**

#### 4 Subject Index

Proceedings of the IEEE , Volume: 87 , Issue: 12 , Dec. 1999  
 Pages:Ind-13 - Ind-50

[\[Abstract\]](#)   [\[PDF Full-Text \(568 KB\)\]](#)   **IEEE JNL**

---

**5 An asynchronous instruction length decoder**

*Stevens, K.S.; Rotem, S.; Ginosar, R.; Beerel, P.; Myers, C.J.; Yun, K.Y.; Koi, R.; Dike, C.; Roncken, M.;*

Solid-State Circuits, IEEE Journal of , Volume: 36 , Issue: 2 , Feb. 2001

Pages:217 - 228

[\[Abstract\]](#)   [\[PDF Full-Text \(240 KB\)\]](#)   **IEEE JNL**

---

**6 Chain: a delay-insensitive chip area interconnect**

*Bainbridge, J.; Furber, S.;*

Micro, IEEE , Volume: 22 , Issue: 5 , Sept.-Oct. 2002

Pages:16 - 23

[\[Abstract\]](#)   [\[PDF Full-Text \(283 KB\)\]](#)   **IEEE JNL**

---

**7 Author Index**

Circuits and Systems for Video Technology, IEEE Transactions on , Volume:

9 , Issue: 8 , Dec. 1999

Pages:1 - 5

[\[Abstract\]](#)   [\[PDF Full-Text \(220 KB\)\]](#)   **IEEE JNL**

---

**8 A seventh-generation x86 microprocessor**

*Golden, M.; Hesley, S.; Scherer, A.; Crowley, M.; Johnson, S.C.; Meier, S.; Meyer, D.; Moench, J.D.; Oberman, S.; Partovi, H.; Weber, F.; White, S.; Wood, T.; Yong, J.;*

Solid-State Circuits, IEEE Journal of , Volume: 34 , Issue: 11 , Nov. 1999

Pages:1466 - 1477

[\[Abstract\]](#)   [\[PDF Full-Text \(468 KB\)\]](#)   **IEEE JNL**

---

**9 Power management in the Amulet microprocessors**

*Furber, S.B.; Efthymiou, A.; Garside, J.D.; Lloyd, D.W.; Lewis, M.J.G.; Temple, S.;*

Design & Test of Computers, IEEE , Volume: 18 , Issue: 2 , March-April 2001

Pages:42 - 52

[\[Abstract\]](#)   [\[PDF Full-Text \(752 KB\)\]](#)   **IEEE JNL**

---

**10 Coming challenges in microarchitecture and architecture**

*Ronen, R.; Mendelson, A.; Lai, K.; Shih-Lien Lu; Pollack, F.; Shen, J.P.;*

Proceedings of the IEEE , Volume: 89 , Issue: 3 , March 2001

Pages:325 - 340

[\[Abstract\]](#)   [\[PDF Full-Text \(196 KB\)\]](#)   **IEEE JNL**

---

**11 Subject Index**

Proceedings of the IEEE , Volume: 89 , Issue: 12 , Dec. 2001

Pages:1864 - 1902

[\[Abstract\]](#)   [\[PDF Full-Text \(282 KB\)\]](#)   **IEEE JNL**

---

**12 Subject Index**

Proceedings of the IEEE , Volume: 88 , Issue: 12 , Dec. 2000  
Pages:INDEX\_13 - INDEX\_52

[\[Abstract\]](#)   [\[PDF Full-Text \(316 KB\)\]](#)   **IEEE JNL**

---

**13 A self-timed real-time sorting network**

*Yun, K.Y.; James, K.W.; Fairlie-Cunninghame, R.H.; Chakraborty, S.; Cruz, R.L.;*  
Very Large Scale Integration (VLSI) Systems, IEEE Transactions on , Volume:  
8 , Issue: 3 , June 2000  
Pages:356 - 363

[\[Abstract\]](#)   [\[PDF Full-Text \(296 KB\)\]](#)   **IEEE JNL**

---

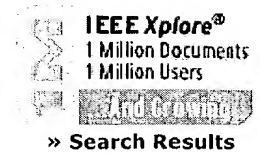
[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC](#)  
[Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

[IEEE HOME](#) | [SEARCH IEEE](#) | [SHOP](#) | [WEB ACCOUNT](#) | [CONTACT IEEE](#)

[Membership](#) | [Publications/Services](#) | [Standards](#) | [Conferences](#) | [Careers/Jobs](#)


Welcome  
United States Patent and Trademark Office


[Help](#) | [FAQ](#) | [Terms](#) | [IEEE Peer Review](#)
[Quick Links](#)
[» Search Results](#)

### Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

### Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

### Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

### Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

### IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

### Print Format

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Your search matched **1** of **1062489** documents.

A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

### Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.

(huffman decoder) and asynchronous and (pyr >= 1950)

☐ Check to search within this result set

### Results Key:

**JNL** = Journal or Magazine   **CNF** = Conference   **STD** = Standard

### 1 A fast asynchronous Huffman decoder for compressed-code embedded processors

*Benes, R.; Nowick, S.M.; Wolfe, A.;*

Advanced Research in Asynchronous Circuits and Systems, 1998. Proceedings. 1998 Fourth International Symposium on , 30 March-2 April 1998  
Pages:43 - 56

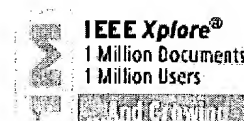
[\[Abstract\]](#)   [\[PDF Full-Text \(912 KB\)\]](#)   **IEEE CNF**



IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE



Membership Publications/Services Standards Conferences Careers/Jobs

Welcome  
United States Patent and Trademark Office

Help FAQ Terms IEEE Peer Review

Quick Links

» Search Results

## Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

## Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

## Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

## Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

## IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

Print Format

Your search matched **21** of **1062489** documents.  
A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

## Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.

asynchronous processor and (pyr >= 1950 and pyr <= 1997)

☐ Check to search within this result set

## Results Key:

**JNL** = Journal or Magazine **CNF** = Conference **STD** = Standard

16 **A result forwarding mechanism for asynchronous pipelined systems**

*Gilbert, D.A.; Garside, J.D.;*

Advanced Research in Asynchronous Circuits and Systems, 1997. Proceedings., Third International Symposium on , 7-10 April 1997

Pages:2 - 11

[\[Abstract\]](#) [\[PDF Full-Text \(884 KB\)\]](#) **IEEE CNF**

17 **ASYNMPU: a fully asynchronous CISC microprocessor**

*Tse, J.M.C.; Lun, D.P.K.;*

Circuits and Systems, 1997. ISCAS '97., Proceedings of 1997 IEEE International Symposium on , Volume: 3 , 9-12 June 1997

Pages:1816 - 1819 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(456 KB\)\]](#) **IEEE CNF**

18 **Synchronous implementation of a counterflow pipeline processor**

*Janik, K.J.; Shih-Lien Lu;*

Circuits and Systems, 1996. ISCAS '96., 'Connecting the World', 1996 IEEE International Symposium on , Volume: 4 , 12-15 May 1996

Pages:69 - 72 vol.4

[\[Abstract\]](#) [\[PDF Full-Text \(228 KB\)\]](#) **IEEE CNF**

19 **A CMOS floating point multiplier**

*Uya, M.; Kaneko, K.; Yasui, J.;*

Solid-State Circuits Conference. Digest of Technical Papers. 1984 IEEE International , Volume: XXVII , Feb 1984

Pages:90 - 91

[\[Abstract\]](#) [\[PDF Full-Text \(536 KB\)\]](#) [IEEE CNF](#)

---

**20 The design of an asynchronous TinyRISC™ TR4101 microprocessor core**  
*Christensen, K.T.; Jensen, P.; Korger, P.; Sparso, J.;*  
Advanced Research in Asynchronous Circuits and Systems, 1998. Proceedings.  
1998 Fourth International Symposium on , 30 March-2 April 1998  
Pages:108 - 119

[\[Abstract\]](#) [\[PDF Full-Text \(700 KB\)\]](#) [IEEE CNF](#)

---

**21 Writing sequential programs for parallel processors: implementation experience**  
*Subramonian, R.;*  
Computing and Information, 1992. Proceedings. ICCI '92., Fourth International  
Conference on , 28-30 May 1992  
Pages:159 - 163

[\[Abstract\]](#) [\[PDF Full-Text \(400 KB\)\]](#) [IEEE CNF](#)

---

[Prev](#) [1](#) [2](#)

---

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC](#)  
[Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

[IEEE HOME](#) | [SEARCH IEEE](#) | [SHOP](#) | [WEB ACCOUNT](#) | [CONTACT IEEE](#)

[Membership](#) | [Publications/Services](#) | [Standards](#) | [Conferences](#) | [Careers/Jobs](#)

 Welcome  
 United States Patent and Trademark Office


» Search Results

[Help](#) | [FAQ](#) | [Terms](#) | [IEEE Peer Review](#)
**Quick Links****Welcome to IEEE Xplore®**

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

**Tables of Contents**

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

**Search**

- ☐ By Author
- ☐ Basic
- ☐ Advanced

**Member Services**

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

**IEEE Enterprise**

- ☐ Access the IEEE Enterprise File Cabinet

Your search matched **2** of **1062489** documents.A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.**Refine This Search:**

You may refine your search by editing the current search expression or entering a new one in the text box.

(variable length) and (decoder) and asynchronous and

☐ Check to search within this result set**Results Key:****JNL** = Journal or Magazine   **CNF** = Conference   **STD** = Standard**1 Shaping codes constructed from cost-constrained graphs***McLaughlin, S.W.; Khayrallah, A.S.;*

Information Theory, IEEE Transactions on , Volume: 43 , Issue: 2 , March 1997

Pages:692 - 699

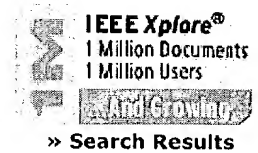
[\[Abstract\]](#)   [\[PDF Full-Text \(292 KB\)\]](#)   **IEEE JNL****2 Digital television on ATM networks: optimum chain for coding and transmission***Leduc, J.-P.;*

Communications, IEEE Transactions on , Volume: 45 , Issue: 7 , July 1997

Pages:829 - 839

[\[Abstract\]](#)   [\[PDF Full-Text \(252 KB\)\]](#)   **IEEE JNL** **Print Format**
[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

[IEEE HOME](#) | [SEARCH IEEE](#) | [SHOP](#) | [WEB ACCOUNT](#) | [CONTACT IEEE](#)[Membership](#) | [Publications/Services](#) | [Standards](#) | [Conferences](#) | [Careers/Jobs](#)Welcome  
United States Patent and Trademark Office[Help](#) | [FAQ](#) | [Terms](#) | [IEEE Peer Review](#)[Quick Links](#)[» Search Results](#)**Welcome to IEEE Xplore®**

- ☐ [Home](#)
- ☐ [What Can I Access?](#)
- ☐ [Log-out](#)

**Tables of Contents**

- ☐ [Journals & Magazines](#)
- ☐ [Conference Proceedings](#)
- ☐ [Standards](#)

**Search**

- ☐ [By Author](#)
- ☐ [Basic](#)
- ☐ [Advanced](#)

**Member Services**

- ☐ [Join IEEE](#)
- ☐ [Establish IEEE Web Account](#)
- ☐ [Access the IEEE Member Digital Library](#)

**IEEE Enterprise**

- ☐ [Access the IEEE Enterprise File Cabinet](#)

**Print Format****Full-text Search Prototype Results**[Feedback](#) [Help](#)

Your search matched **0** of **1043369** documents.  
A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

**Refine This Search:**

You may refine your search by editing the current search expression or entering a new one in the text box.

☐ Check to search within this result set**Results Key:**

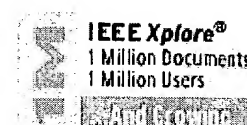
**JNL** = Journal or Magazine   **CNF** = Conference   **STD** = Standard

**Results:**

**No documents matched your query.**

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

[IEEE HOME](#) | [SEARCH IEEE](#) | [SHOP](#) | [WEB ACCOUNT](#) | [CONTACT IEEE](#)[Membership](#) | [Publications/Services](#) | [Standards](#) | [Conferences](#) | [Careers/Jobs](#)Welcome  
United States Patent and Trademark Office[Help](#) | [FAQ](#) | [Terms](#) | [IEEE Peer Review](#)[Quick Links](#)[» Search Results](#)**Welcome to IEEE Xplore®**

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

**Tables of Contents**

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

**Search**

- ☐ By Author
- ☐ Basic
- ☐ Advanced

**Member Services**

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

**IEEE Enterprise**

- ☐ Access the IEEE Enterprise File Cabinet

**Print Format**[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)**Full-text Search Prototype Results**[Feedback](#) | [Help](#)

Your search matched **0** of **1043369** documents.  
A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

**Refine This Search:**

You may refine your search by editing the current search expression or entering a new one in the text box.

☐ Check to search within this result set**Results Key:**

**JNL** = Journal or Magazine   **CNF** = Conference   **STD** = Standard

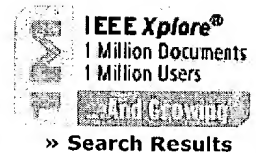
**Results:**

**No documents matched your query.**

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE



Membership Publications/Services Standards Conferences Careers/Jobs

Welcome  
United States Patent and Trademark Office
[Help](#) [FAQ](#) [Terms](#) [IEEE Peer Review](#)

Quick Links

Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

## Full-text Search Prototype Results

[Feedback](#) [Help](#)

Your search matched **1** of **1043369** documents.  
A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

## Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.

self timed&lt;and&gt;domino logic&lt;and&gt;huffman

Search

☐ Check to search within this result set

## Results Key:

JNL = Journal or Magazine CNF = Conference STD = Standard

## 1 Lazy transition systems and asynchronous circuit synthesis with relative timing assumptions

Cortadella, J.; Kishinevsky, M.; Burns, S.M.; Kondratyev, A.; Lavagno, L.; Stevens, K.S.; Taubin, A.; Yakovlev, A.;

Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on, Volume: 21, Issue: 2, Feb. 2002

Pages:109 - 130

[\[Abstract\]](#)[\[PDF Full-Text \(511 KB\)\]](#)

IEEE JNL

Print Format

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

**Results Key:**

**JNL** = Journal or Magazine   **CNF** = Conference   **STD** = Standard

---

**16 Asynchronous datapath with software-controlled on-chip adaptive voltage scaling for multirate signal processing applications**

*Yee William Li; Patounakis, G.; Jose, A.; Shepard, K.L.; Nowick, S.M.;*

Asynchronous Circuits and Systems, 2003. Proceedings. Ninth International Symposium on , 12-15 May 2003

Pages:216 - 225

**IEEE CNF**

---

**17 Analysis of blocking dynamic circuits**

*Thorp, T.; Liu, D.;*

Computer Design: VLSI in Computers and Processors, 2002. Proceedings. 2002 IEEE International Conference on , 16-18 Sept. 2002

Pages:122 - 124

**IEEE CNF**

---

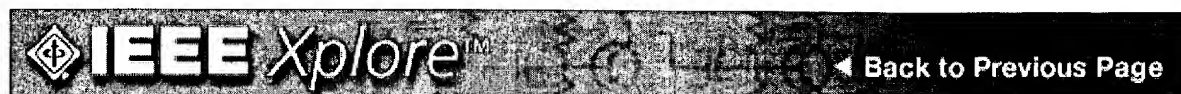
**18 Proceedings 2002 Design, Automation and Test in Europe Conference and Exhibition**

Design, Automation and Test in Europe Conference and Exhibition, 2002.

Proceedings , 4-8 March 2002

**IEEE CNF**

---

**Results Key:**

**JNL** = Journal or Magazine   **CNF** = Conference   **STD** = Standard

---

**1 The implementation of the Itanium 2 microprocessor**

*Naffziger, S.D.; Colon-Bonet, G.; Fischer, T.; Riedlinger, R.; Sullivan, T.J.; Grutkowski, T.;*

Solid-State Circuits, IEEE Journal of , Volume: 37 , Issue: 11 , Nov. 2002

Pages:1448 - 1460

**IEEE JNL**

---

**2 The design and verification of a high-performance low-control-overhead asynchronous differential equation solver**

*Yun, K.Y.; Beerel, P.A.; Vakilotojar, V.; Dooply, A.E.; Arceo, J.;*

Very Large Scale Integration (VLSI) Systems, IEEE Transactions on , Volume: 6 , Issue: 4 , Dec. 1998

Pages:643 - 655

**IEEE JNL**

---

**3 VLSI implementations of threshold logic-a comprehensive survey**

*Beiu, V.; Quintana, J.M.; Avedillo, M.J.;*

Neural Networks, IEEE Transactions on , Volume: 14 , Issue: 5 , Sept. 2003

Pages:1217 - 1243

**IEEE JNL**

---

**4 A 2/spl times/ load/store pipe for a low-power 1-GHz embedded processor**

*Zongjian Chen; Murray, D.; Nishimoto, S.; Pearce, M.; Oyker, M.; Rodriguez, D.;*

*Rogenmoser, R.; Dongwook Suh; Supnet, E.; von Kaenel, V.R.; Yiu, G.;*

Solid-State Circuits, IEEE Journal of , Volume: 38 , Issue: 11 , Nov. 2003

Pages:1857 - 1865

**IEEE JNL**

---

**5 Analysis of blocking dynamic circuits**

*Thorp, T.; Liu, D.; Trivedi, P.;*

Very Large Scale Integration (VLSI) Systems, IEEE Transactions on , Volume:

11 , Issue: 4 , Aug. 2003

Pages:744 - 748

**IEEE JNL**

---

**6 Timing analysis of asynchronous systems using time separation of events**

*Chakraborty, S.; Yun, K.Y.; Dill, D.L.;*

Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions

on , Volume: 18 , Issue: 8 , Aug. 1999

Pages:1061 - 1076



---

**IEEE JNL**

---

**7 A fully bypassed six-issue integer datapath and register file on the Itanium-2 microprocessor**

Fetzer, E.S.; Gibson, M.; Klein, A.; Calick, N.; Chengyu Zhu; Busta, E.; Mohammad, B.;  
Solid-State Circuits, IEEE Journal of , Volume: 37 , Issue: 11 , Nov. 2002  
Pages:1433 - 1440

---

**IEEE JNL**

---

**8 Lazy transition systems and asynchronous circuit synthesis with relative timing assumptions**

Cortadella, J.; Kishinevsky, M.; Burns, S.M.; Kondratyev, A.; Lavagno, L.; Stevens, K.S.; Taubin, A.; Yakovlev, A.;  
Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on , Volume: 21 , Issue: 2 , Feb. 2002  
Pages:109 - 130

---

**IEEE JNL**

---

**9 Boosters for driving long onchip interconnects - design issues, interconnect synthesis, and comparison with repeaters**

Nalamalpu, A.; Srinivasan, S.; Burleson, W.P.;  
Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on , Volume: 21 , Issue: 1 , Jan. 2002  
Pages:50 - 62

---

**IEEE JNL**

---

**10 Timed circuit verification using TEL structures**

Belluomini, W.; Myers, C.J.; Hofstee, H.P.;  
Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on , Volume: 20 , Issue: 1 , Jan. 2001  
Pages:129 - 146

---

**IEEE JNL**

---

**11 An asynchronous instruction length decoder**

Stevens, K.S.; Rotem, S.; Ginosar, R.; Beerel, P.; Myers, C.J.; Yun, K.Y.; Koi, R.; Dike, C.; Roncken, M.;  
Solid-State Circuits, IEEE Journal of , Volume: 36 , Issue: 2 , Feb. 2001  
Pages:217 - 228

---

**IEEE JNL**

---

**12 A third-generation SPARC V9 64-b microprocessor**

Heald, R.; Aingaran, K.; Amir, C.; Ang, M.; Boland, M.; Dixit, P.; Gouldsberry, G.; Greenley, D.; Grinberg, J.; Hart, J.; Horel, T.; Wen-Jay Hsu; Kaku, J.; Chin Kim; Song Kim; Klass, F.; Kwan, H.; Lauterbach, G.; Lo, R.; McIntyre, H.; Mehta, A.; Murata, D.; Nguyen, S.; Yet-Ping Pai; Patel, S.; Shin, K.; Tam, K.; Vishwanthaiah, S.; Wu, J.; Yee, G.; You, E.;  
Solid-State Circuits, IEEE Journal of , Volume: 35 , Issue: 11 , Nov. 2000  
Pages:1526 - 1538

---

**IEEE JNL**

---

**13 A self-timed real-time sorting network**

*Yun, K.Y.; James, K.W.; Fairlie-Cunningham, R.H.; Chakraborty, S.; Cruz, R.L.;*  
Very Large Scale Integration (VLSI) Systems, IEEE Transactions on , Volume: 8 , Issue:  
3 , June 2000  
Pages:356 - 363

---

**IEEE JNL**

---

**14 CA-BIST for asynchronous circuits: a case study on the RAPPID asynchronous instruction length decoder**

*Roncken, M.; Stevens, K.; Pendurkar, R.; Rotem, S.; Chaudhuri, P.P.;*  
Advanced Research in Asynchronous Circuits and Systems, 2000. (ASYNC 2000)  
Proceedings. Sixth International Symposium on , 2-6 April 2000  
Pages:62 - 72

---

**IEEE CNF**

---

**15 Proceedings Design, Automation and Test in Europe Conference and Exhibition**

Design, Automation and Test in Europe Conference and Exhibition, 2003 , 2003

---

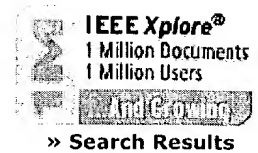
**IEEE CNF**

---

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE



Membership | Publications/Services | Standards | Conferences | Careers/Jobs

Welcome  
United States Patent and Trademark Office

Help | FAQ | Terms | IEEE Peer Review

Quick Links

Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

Print Format

## Full-text Search Prototype Results

Feedback Help

Your search matched **18** of **1043369** documents.  
A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

## Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.

self timed&lt;and&gt;domino logic&lt;and&gt;decoder

Search

☐ Check to search within this result set

## Results Key:

**JNL** = Journal or Magazine   **CNF** = Conference   **STD** = Standard

**16 Asynchronous datapath with software-controlled on-chip adaptive voltage scaling for multirate signal processing applications**

*Yee William Li; Patounakis, G.; Jose, A.; Shepard, K.L.; Nowick, S.M.;*  
Asynchronous Circuits and Systems, 2003. Proceedings. Ninth International Symposium on , 12-15 May 2003  
Pages:216 - 225

[Abstract] [PDF Full-Text (2330 KB)] **IEEE CNF**

**17 Analysis of blocking dynamic circuits**

*Thorp, T.; Liu, D.;*  
Computer Design: VLSI in Computers and Processors, 2002. Proceedings. 2002 IEEE International Conference on , 16-18 Sept. 2002  
Pages:122 - 124

[Abstract] [PDF Full-Text (365 KB)] **IEEE CNF**

**18 Proceedings 2002 Design, Automation and Test in Europe Conference and Exhibition**

Design, Automation and Test in Europe Conference and Exhibition, 2002.  
Proceedings , 4-8 March 2002

[Abstract] [PDF Full-Text (472 KB)] **IEEE CNF**

Prev 1 2